



A.oryzaeCP1	293	AVNETVYN - - - - YMKFANQMPNGCQDLISTCKQTN
PenicilliumS3	207	IDSSTRDS - - - - LLDAYN - - - NQCLPALQQCSQSG
PenicilliumS1	225	LEHLHKSCGYADFDIDKYLTFFPPKEQPPLFFNYTS
A.phoenicis	271	INGKADKCGYN AFLDKAITYP PP - - - TPFPTAPEI
A.niger	278	LES IHEQCGYKDFIDQYLVFPASGVQPPKAMNWS D
A.oryzaeCP1	324	RTALADYALCAEATNMCRDNVEGPYYAFAGRGVYD
PenicilliumS3	235	STS - - - - DCTNADSVCYQNI EGPISSSGDFDVYD
PenicilliumS1	260	MANEDVFDMMVYNEVF KINPCFDLYEVNLMCPLQWD
A.phoenicis	303	TEDCQVWDEVVMAAYDINPCFNYYHLIDFCPYLWD
A.niger	313	PT - CDVYDIVNNAVLDPNPCFN PYEINEMCPI LWD
A.oryzaeCP1	359	IR - H P YDDPTPPSYYNKFLAKDS VMDAIGVN - INY
PenicilliumS3	265	IR - E PSNDPYPPKTYSTYLS DPT VVKAIGAR - TNY
PenicilliumS1	295	VLA F P TSLVYQPAGATVYFDRAD VKKALHAPNVTW
A.phoenicis	338	VLGF P S - - - - LGFGPDNYFN RSD VQKILHVPPTDY
A.niger	347	VLGF P T EVDYLPAGAS IYFDRAD V KRAMHAPNITW
A.oryzaeCP1	392	TQSNNDVYYAFQQTG - - - - D FVWPNFIED LEEIL
PenicilliumS3	298	QECPNGPYNKFAS T G - - - - DNPRS - FLST LSSV V
PenicilliumS1	330	AECNNPVFVGGS SGPEQEG DTSANPIEHVLPQVI
A.phoenicis	369	SVCSETVIFANGDGS - - - - DPSS - - - WGPLPSVI
A.niger	382	SECSVESVFVG DGGPEQEG DYSANPIEHVLPQVI
A.oryzaeCP1	422	ALPVRVSLIY G DADYICNWF G GQAVSLAANYSQAA
PenicilliumS3	327	QSGINVLVWAG DADWICNWL G NYEVANAVDFPGNA
PenicilliumS1	365	EATNRVLISN G D FDMVILTN G TLLAIQNMTWNGHL
A.phoenicis	396	ERTNNTIIGH G WLDYLLFLN G SLATIQNMTWNGKQ
A.niger	417	EGTNRVLIGN G DYDMVILTN G TLLSIQNMTWNGKL
A.oryzaeCP1	457	Q F RSAGYT P LKVNGVEYGETREYGNFSFTRVYEAG
PenicilliumS3	362	QFSALDLAPYT VNGVEKGQFKTVDNFSFLKVYGAG
PenicilliumS1	400	G F QKKPSAP I DIKIPDLQYKEVFAEN - GASSLDGA
A.phoenicis	431	G F QSPPE P L FVPYHYGLAELYWGDEPDYPNLDAG
A.niger	452	G F D TAPST P I NIDIPDLMYNEVFIEN - GYD - PQGG
A.oryzaeCP1	492	HEVPYYQPIASLQLFNRTIFGWDIAEGQKKIWPSY
PenicilliumS3	397	HEVPYYQPDTALQAFKQIIQ - - - - - KKPI SST -
PenicilliumS1	434	QGIMGVQHYERGLMKAQTYQSG - - - - - HMQPQYQP -
A.phoenicis	466	AGYLGTAHTERGLTFSSVYLSG - - - - - HEIPQYVPG
A.niger	485	QGVMGIQHYERGLMWAETFQSG - - - - - HMQPQFQP -
A.oryzaeCP1	527	KTNGTATATH TQSSVPLPTATSMSSVGMA
PenicilliumS3	0	- - - - -
PenicilliumS1	464	- - - - - RVAYRHLEWLLKRTDELQ - - - - -
A.phoenicis	497	ALTASWSSCLVELIVFPRRGTTPLNFS - -
A.niger	515	- - - - - RVSYRHLEWLLGRRDTL - - - - -

Fig. 4B



A.oryzaeCP1	1	- - - - -MRGYEFLSVLPLVAAS - - - - -WAL
PenicilliumS3	1	- - - - -
PenicilliumS1	1	- - - - -
A.phoenicis	1	- - - - -MRITSAIASLLLVGTATSLQN - - -PHRRAV
A.niger	1	MLFRSLLSTAVLAVSLCTDNASAAKHGRFGQKARD
A.oryzaeCP1	20	PGSTPASVGRRQLPKNPTGVKTLTTANNVTIRYKE
PenicilliumS3	1	- - - - -FVKN - - - - -
PenicilliumS1	1	- - - - -STKNYRFLNEKTKANLV
A.phoenicis	28	PPPLTHRSVASRAVPVERRSNDFEYLTNKTARFLV
A.niger	36	AMNIAKRSANAVKHSCLKIPVEDYQFLNNKTKPYRV
A.oryzaeCP1	55	PGAEGVCETTPGVKS[YS][G]YVDTSP - -ESHTF[F]W[F]F
PenicilliumS3	5	- - -SGICETTPGVNQ[YS][G]YLSVGS - -NMNMW[F]W[F]F
PenicilliumS1	18	H - -HLPDVPYDIGEM[YS][G]LMPIDMHNESRALFYIF
A.phoenicis	63	NGTSIPEVDFDVGESYAGLLPNTPTGNSSLFFFWFF
A.niger	71	E - -SLPDVHFDLGE[YS][G]LVPIEKGNVSRSLFF[F]V[F]
A.oryzaeCP1	88	EARHNPETAPITLW[LV]N[GG]P[GS]D[SL]IGLFEEL[GL]PCH
PenicilliumS3	35	EARNNPQQAPLAAW[F]N[GG]P[GS]S[M]IGLFQEN[GL]PCH
PenicilliumS1	51	QPTIGEPVDEVTIWMN[GG]P[GS]S[M]ESFLQETGRFL
A.phoenicis	98	PSQNP DASDEITIW[LV]N[GG]P[GS]S[L]DGLLQEN[GL]PFL
A.niger	104	QPTIGEPVDEITIW[LV]N[GG]P[GS]S[L]EAFLQEN[GL]RFV
A.oryzaeCP1	123	- VNSTFDDYIN[PH]S[WN]EVS[N]LLFLS[QPL]G[VGF]S[YS]
PenicilliumS3	70	FVNGDSTPSLN[EN]S[WN]N[AN]MIYIDQPIG[VGF]S[YS]G
PenicilliumS1	86	WQPGTYAPVEN[PY]S[WN]VLT[N]VLWVDQPVGTG[YS]IG
A.phoenicis	133	WQPGTYKVPV[PN]P[YS]W[TN]LT[N]VVYIDQPA[GT]G[FS]PG
A.niger	139	WQPGTYQPVEN[PN]P[YS]W[VN]LT[N]VLWVDQPVGTG[FS]LG
A.oryzaeCP1	157	DTV DGSINPVTGVVENSSFAGVQGRYPTIDATLID
PenicilliumS3	105	- -TDDVTSTVT - - - - -
PenicilliumS1	121	TPTATSQ - - - - -
A.phoenicis	168	PSTVNDE - - - - -
A.niger	174	VPTATSE - - - - -
A.oryzaeCP1	192	TTNLA AEAAWEILQG[F]LSGLPSLDSRVQSKDFSLW
PenicilliumS3	114	- - - - AAPYVWNLLQAFY[AQRPEYES] - - -RDFAIF
PenicilliumS1	128	- - - - -EETAQDFVK[F]FKNFQKTYGIKN - -FKIYVT
A.phoenicis	175	- - - - -EDVAAQFNSW[F]KFHFVDTFDLHG - -RKVYIT
A.niger	181	- - - - -EEIAEDFVK[F]FKNWQQIFGIKN - -FKIYVT
A.oryzaeCP1	227	T[ES]Y[G]G[H]Y[G]P[A]FFNHFYEQNERIANGSVN[G]VQLNF
PenicilliumS3	141	T[ES]Y[G]G[H]Y[G]P[E]FASYIEQQNAAIKAGSVT[G]QNVNI
PenicilliumS1	156	G[ES]Y[A]G[R]Y[V]P[Y]ISAAMLDEKD - KEYFDLQ[G]ALAYD
A.phoenicis	203	G[ES]Y[A]G[M]Y[V]P[Y]IADAMLNEED - TTYFNLK[G]IQIND
A.niger	209	G[ES]Y[A]G[R]Y[V]P[Y]ISAAFLDQND - TEHFNLK[G]ALAYD
A.oryzaeCP1	262	NSLGIINGIIDEAIAQAPYYPE - - -[F]AV[N]NTYGIK
PenicilliumS3	176	VALGVNNGWIDSTIQEKAYID - - -[F]SY[N]NSYQQI
PenicilliumS1	190	PCIGQFDYVQEEIPVVPFVKENANL[F]N[F]N[ET]FMAE
A.phoenicis	237	PSINS - DSVM MYSPAVRHLNHYNNI[F]RL[N]STFLSY
A.niger	243	PCIGQFDYVQEEAPVVPFVQKNNAL[F]N[F]N[AS]FLAE

Fig. 4A